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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,271	08/15/2001	Ricky K. C. Yeung	24753	8109
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		EXAMINER		
		MADSEN, ROBERT A		
		ART UNIT		
		1761		
		PAPER NUMBER		

DATE MAILED: 03/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/929,271	<b>Applicant(s)</b> YEUNG, RICKY K. C.	
	<b>Examiner</b> Robert Madsen	<b>Art Unit</b> 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3 and 5-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 5-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. The amendment filed December 4, 2003 has been entered. Claims 2 and 4 have been cancelled. Claims 1, 3, 5-11 are currently pending in the application.

1. The rejection of claims 1, 6-10 made under 35 U.S.C. 102(b) as being anticipated by Lagarde et al. (US 4929460) in the Office Action mailed June 4, 2003 is hereby withdrawn.

2. The rejection of claims 1, 6, 7 made under 35 U.S.C. 102(a) as being clearly anticipated by Llorente Hompanera (US 6197359 B1) in the Office Action mailed June 4, 2003 is hereby withdrawn.

3. The rejection of claims 2 and 3 made under 35 U.S.C. 103(a) as being unpatentable over Lagarde et al. (US 4929460) in view of Hammesfahr et al. (US 2834753) in the Office Action mailed June 4, 2003 is hereby withdrawn.

4. The rejection of claims 4 and 5 made under 35 U.S.C. 103(a) as being unpatentable over Lagarde et al. (US 4929460) in view of Llorente Hompanera (US 6197359 B1). and Phipps et al. (US 6063894) in the Office Action mailed June 4, 2003 is hereby withdrawn.

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 3, 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lagarde et al. (US 4690967) in view Llorente Hompanera (US 6197359 B1) and White

et al. (US 3310521) and Phipps et al. (US 6063894) and Osaka Titanium Co (JP73014145 B)

4. Regarding claims 1,3,5-10, Lagarde et al. teaches preparing a flexible mold formed essentially by a silicone elastomer containing methyl-vinyl polysiloxane as recited in claim 6 (Column 4, lines 15-37, Column 5, lines 47-51), cross-linked with 2,5-dimethyl-2,5-ditertbutylperoxy hexane as recited in claims 8 and 9 (Column 7, lines 13-20), at 0.3-4% as recited in claim 10 (Column 3, line 60 to Column 4, line 8) and baked at an elevated temperature (Column 12, lines 7-67) wherein the product may be used for contact with foodstuffs as recited in claim 6 (Column 13, lines 3-9). Additionally Lagarde et al. teach heating following the molding step to remove volatiles (Column 11, lines 43-45, Column 12, lines 28-32), but Lagarde et al. are silent in teaching rinsing with boiling water for 4-16 hours after molding as recited in claims 1 and 3, or cleaning the rinsed molds with ultrasonic treatment for 5-30 minutes as recited in claims 1 and 5.

5. Llorente Hompanera also teaches silicone rubbers used for food molds made from methyl-vinyl polysiloxane. Llorente Hompanera is relied on as evidence of a conventional method of post-cure treatment for a food mold. Llorente Hompanera teaches food molds must be (1) sterilized prior to use for about 5 hours (in a hot oven at a maximum temperature of 200°C) and (2) "purified" for 30 minutes following the sterilization step (Column 4, lines 15-20). Llorente Hompanera further teaches using peroxide as a crosslinking agent to form food molds generates peroxide residues and by-products, which are undesirable (Column 3, line 23 to Column 4, line 10).

6. White et al. are relied on as evidence of sterilizing silicone rubbers of the same composition as Lagarde et al. in boiling water (Column 1, lines 9-33, Column 2, lines 8-43, Column 4, lines 15-34).

7. Phipps et al. are relied on as evidence of a conventional "purification" step. Phipps et al teach the it was known to remove undesired residues/impurities from *oriented* polymers material using ultrasonification as a quicker alternative to conventional leaching/separation methods (Column 1, lines 1-67, especially note lines 59-67) . Phipps et al. further teach the general relationship between of the operational parameters of ultrasonification (i.e. time, temperature, and frequency) and the level of purity achieved, albeit in reference to treatment of unoriented polymers (Column 3,lines 18 to Column 4, line 39, Column 5, line 26, Figures).

8. Osaka Titanium Co. is relied on as evidence that combining washing with boiling water and ultrasonic treatment, *in combination*, for removal of impurities was notoriously well known.

9. Therefore, it would have been obvious to modify Lagarde et al. and include a sterilizing step for 5 hours, as recited in claim 3, and a purifying step for 30 minutes, as recited in claim 3, after forming the mold since Llorente Hompanera teaches food molds are sterilized and purified subsequent to curing. One would have been substituting one conventional food mold-forming step for another for the same purpose.

10. It would have been further obvious to include a boiling water sterilization step since White et al. teach sterilizing silicone rubber based molds can be done in boiling water. One would have been substituting one conventional sterilizing method for

another for treating silicone rubbers. Furthermore, to select any particular time would have been an obvious result effective variable of the water temperature selected since Llorente Hompanera teaches 5 hours using air at 200°C, and one would expect boiling water to take longer to sterilize given the lower temperature range of boiling water.

11. It would have been further obvious to apply a ultrasonic treatment step since Phipps et al. teach ultrasonification as a method of removing unwanted impurities from a polymer structure that requires less time than conventional methods (i.e. this is a "purifying methods"). One would have been substituting one conventional purification step for another for the same purpose: purify an oriented polymer. To select an particular time for ultrasonification, as recited in claim 5, would have been an obvious result effective variable of the particular temperature and frequency selected since Phipps et al. teach the governing parameters are time, temperature, and frequency.

12. Regarding claim 11, Lagarde et al. are silent in teaching the particular steps involved in utilizing the food mold. However, Llorente Hompanera teaches food molds made from the same material are utilized by placing the food product in the mold, placing the mold/food product in the oven, baking the food product, removing the mold/food product from the oven and removing the food from the mold (Claims 1-3). Therefore it would have been obvious to modify Lagarde et al. and include the method of preparing a food product in the mold since Llorente Hompanera teaches food molds made from a silicone rubber from methyl-vinyl polysiloxane are used by placing the food product in the mold, placing the mold/food product in the oven, baking the food product, removing the mold/food product from the oven and removing the food from the

mold. One would have been substituting one conventional food use for another for the same silicone rubber mold.

### ***Response to Arguments***

13. Applicant's arguments with respect to the amended claims have been considered but are moot in view of the new ground(s) of rejection necessitated by the amendment.

14. However, regarding applicant's argument that Phipps et al. only teaches ultrasonic treatment for *unoriented* polymers, applicant's attention is directed to Column 1, lines 59-67 of Phipps et al., where it is taught that ultrasonic treatment for *oriented* polymers was known.

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

16. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Madsen whose telephone number is (571) 272-1402. The examiner can normally be reached on 7:00AM-3:30PM M-F.

18. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

19. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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Art Unit 1761

